

WHAT IS CLAIMED IS:

1. A process for forming a multiple component meltblown fiber
5 comprising extruding a first melt-processable polymer through a first extrusion
orifice, simultaneously extruding a second melt-processable polymer through a
second extrusion orifice, fusing said first and second melt-processable polymers
into an extruded composite filament after extrusion, and pneumatically attenuating
said extruded composite filament with at least one jet of high velocity gas so as to
10 form said multiple component meltblown fiber.
2. The process of claim 1 wherein the composite filament is
attenuated with a plurality of high velocity gas jets.
- 15 3. The process of claim 1 wherein said composite filament is broken
by the at least one jet of high velocity gas so as to form a plurality of multiple
component meltblown fibers.
- 20 4. The process according to claim 1, wherein said first and second
melt-processable polymers have different viscosities as a function of temperature.
5. The process according to claim 1, wherein said first and second
melt-processable polymers have different melting and/or softening points.
- 25 6. The process according to claim 1, wherein said first and second
melt-processable polymers are chemically different polymers.
- 30 7. The process according to claim 6, wherein said first melt-
processable polymer is a polyester and the second melt-processable polymer is
polyethylene.
8. The process according to claim 7 wherein said polyester is
poly(ethylene terephthalate).
- 35 9. A nonwoven fabric produced by collecting the meltblown fibers
according to claim 1 on a collecting surface.
- 40 10. The nonwoven fabric of claim 9 wherein said collecting surface is
a spunbond nonwoven fabric.
11. An extrusion die for meltblowing molten polymers comprising a
row of die orifices each comprising at least two separate polymer supply ports
entering from an entrance portion of the die, each of said polymer supply ports

communicating with separate extrusion capillaries having exit openings at an exit portion of the die, gas supply ports entering from the entrance portion of the die and arranged laterally to said polymer supply ports, said gas supply ports communicating with gas jets extending through the die and arranged laterally to the exit openings of said extrusion capillaries, wherein said extrusion capillary exit openings and said gas jets communicate with a blowing orifice in the exit portion of the die.

12. An extrusion die for meltblowing molten polymers comprising at least two separate polymer supply ports entering from an entrance portion of the die, said polymer supply ports communicating with separate extrusion capillaries having exit openings at an exit portion of the die, said separate extrusion capillaries cooperating as a combined orifice, at least one gas supply port entering from the entrance portion of the die, said gas supply port communicating with at least one gas jet extending through the die and arranged concentrically around the exit openings of said combined orifice, wherein said extrusion capillary exit openings and said gas jet communicate with a blowing orifice in the exit portion of the die.

13. The extrusion die according to either of claims 11 or 12, wherein said extrusion capillaries are angled toward a common longitudinal axis.

14. The extrusion die according to either of claims 11 or 12, wherein said extrusion die comprises at least two gas jets and wherein said extrusion capillaries and said gas jets are angled toward a common longitudinal axis.

15. The extrusion die according to either of claims 11 or 12, wherein said extrusion die comprises at least two gas jets and wherein said extrusion capillaries are parallel to each other and said gas jets are angled toward a common longitudinal axis.